15.2, number 1: Sketch the region of integration in the xy-plane which is associated to the integral

$$\int_0^3 \int_0^{2x} f(x,y) \, dy \, dx.$$

Answer: For each fixed x with $0 \le x \le 3$, y goes from zero to 2x. There is a picture on the next page.

Picture for 15,2 Number 1

Y=2X 3 X